Exhibit 928-4

IN THE UNITED STATES
PATENT AND TRADEMARK OFFICE

Patent Application

Inventor(s): Thyagarajan Nandagopal et al.
Case: ALU/130080
Examiner: Le, Thu Nguyet T
Confirmation #: 2601

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Serial No.: 12/415,375
Group Art Unit: 2162

Title: MULTI-LEVEL ENMESHED DIRECTORY STRUCTURES

MAIL STOP AMENDMENT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

SIR:

RESPONSE AMENDMENT

In response to the non-final Office Action mailed August 23, 2011, please reconsider the above-identified application as follows.

In the event that an extension of time is required for this response to be considered timely, and a request therefor does not otherwise accompany this response, any necessary extension of time is hereby requested.

Applicant does not believe that any fee is due in connection with this response. In the event Applicant is incorrect, the Commissioner is authorized to charge any fees due, including extension of time and excess claim fees, to counsel's Deposit Account No. 50-4802/**ALU/130080**.

AMENDMENT TO THE CLAIMS:

Please reconsider the claims as set forth below. No new matter has been added. Support for the amendment is found on page 12:4-8.

1. (Currently Amended) A method for generating a multi-level hierarchical directory structure and establishing relationships between descriptors, the method comprising:

selecting an initial data object;

creating one or more descriptors associated with the data object wherein each of said descriptors are further associated with one or more corresponding descriptors thereby forming a multi-level relational tree;

determining the relationship between the one or more descriptors; [[and]]

creating a hierarchical structure linking the different levels of descriptors; [[and]]

updating a corresponding database; and

identifying a single initial descriptor that links a plurality of descriptors and two or more predecessor descriptors linking another single descriptor to thereby establish relationships between different descriptors relative to themselves and to the single initial descriptor.

2. (Original) The method of claim 1, wherein each descriptor can be related to one or more predecessor descriptors thereby forming a hierarchical relationship.

3. (Original) The method of claim 1, wherein each descriptor can be associated with one or more predecessor descriptors and the relationship of the object to the one or more predecessor descriptors is acyclic.

4. (Original) The method of claim 1, further comprising determining the relationships between different descriptors relative to themselves and to the initial data object.

5. (Currently Amended) The method of claim 1, wherein the operation further comprises a graphical user interface (GUI) to navigate the enmeshed directory in both directions, said GUI presents both ~~descriptors/objects~~ descriptors or objects described by a particular descriptor using proper links and the descriptors describing the ~~object/descriptor~~ object or descriptor using proper links.

6. (Currently Amended) A network management system communicatively coupled to one or more element management systems adapted to perform a method for creating a multi-level hierarchical directory structure and establishing relationships between descriptors, comprising:

a processor for executing software instructions received from a memory to perform thereby a method for, the method comprising:

linking each of a plurality of data objects to multiple respective descriptors, each of said descriptors being linked with one or more predecessor tags; and

identifying a single initial descriptor that links a ~~list of objects~~ plurality of descriptors and two or more predecessor descriptors linking [[a]] another single descriptor to thereby establish the relationships between different descriptors relative to themselves and to the single initial ~~data object~~ descriptor.

7. (Currently Amended) The system of claim 6, wherein the operation further comprises a graphical user interface (GUI) to navigate the enmeshed directory in both directions, said GUI presents both ~~descriptors/objects~~ descriptors or objects described by a particular descriptor using proper links and the descriptors describing the ~~object/descriptor~~ object or descriptor using proper links.

8. (Original) The method of claim 6, wherein the relationships of the object to the one or more descriptors is acyclic.

9. (Currently Amended) A mesh network system comprising a network manager adapted to manage the mesh network and perform a method for creating a multi-level

hierarchical directory structure and establishing relationships between descriptors, the method comprising:

linking by a device each of a plurality of mesh clients and nodes to multiple respective descriptors, each of said descriptors being linked with one or more predecessor descriptors; and

identifying a single initial descriptor that links a list of mesh clients and two or more predecessor descriptors linking [[a]] another single descriptor thereby establishing the relationships between different descriptors relative to themselves and to the single initial mesh client.

10. (Currently Amended) The mesh network system of claim 9, wherein the network manager further comprises a GUI to navigate the enmeshed directory in both directions, said GUI presenting both ~~descriptors/clients~~ descriptors or objects described by particular descriptor using proper links and the descriptors describing the ~~client/descriptor~~ client or descriptor using proper links.

11. (Original) The mesh network system of claim 9, wherein the client is one of a radio node, a router, a gateway.

12. (Original) The mesh network system of claim 9, wherein the relationships of the client to the one or more descriptors is acyclic.

13. (Currently Amended) A computer readable medium for storing instructions which, when executed by one or more processors communicatively coupled to a network, perform a method for creating a multi-level hierarchical directory structure and establishing relationships between descriptors, comprising:

linking by a device an object to multiple descriptors describing said object, each of said descriptors being identified by one or more predecessor descriptors linked to the descriptor; and

identifying a single initial descriptor that links a ~~list of objects~~ plurality of descriptors and two or more predecessor descriptors linking [[a]] another single descriptor to thereby establish relationships between different descriptors relative to themselves and to the single initial descriptor.

14. (Currently Amended) The computer readable medium of claim 13, wherein navigating the enmeshed directory in both directions requires the GUI, said GUI presents both ~~descriptors/objects~~ descriptors or objects described by a particular descriptor using proper links and the descriptors describing the ~~object/descriptor~~ object or descriptor using proper links.

15. (Currently Amended) The computer readable medium of claim 13, wherein the relationship of the object to the one or more descriptors is acyclic.

16. (Original) The computer readable medium of claim 13, further comprising determining the relationships between different descriptors relative to themselves and to the initial data object.

17. (Currently Amended) A content server multicasting to a plurality of client servers in a network system adapted to perform a method for creating a multi-level hierarchical directory and establishing relationships between descriptors, the method comprising:

linking by the content server each of a plurality of client servers to multiple respective descriptors, each of said descriptors being linked with one or more predecessor descriptors wherein a top level predecessor descriptor corresponds to the content server; and

identifying a single initial descriptor that links a plurality [[list]] of client servers and two or more predecessor descriptors linking [[a]] another single descriptor to thereby establish relationships between different descriptors relative to themselves and to the single initial client server.

18. (Currently Amended) The method of claim 17, further comprising generating a graphical user interface (GUI) to visualize navigation of the enmeshed directory in both directions, said GUI presenting both ~~descriptors/client~~ descriptors or clients servers described by a particular descriptor using proper links and descriptors describing the client ~~server/descriptor~~ server or descriptor using proper links.

19. (original) The network system of claim 17, wherein each descriptor can be associated with one or more predecessor descriptors and the relationships of the client server to the one or more descriptors is acyclic.

20. (original) The network system of claim 17, wherein the network further comprises a social network and the plurality of client servers comprise one or more end users.

REMARKS

Claims 1-20 are pending in the application, with claims 1, 6, 9, 13 and 17 being independent.

The drawings are objected to under 37 C.F.R. §1.83(n) and §1.84(o).

Claims 5, 7, 10, 14-15 and 18 are objected to for informalities.

Claims 9-20 are rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter.

Claims 1-4, 6, 8-9, 11-13, 15-17 and 19-20 are rejected under 35 U.S.C. §102(e) as being anticipated by Liang (US 2008/0279273).

Claims 5, 7, 10, 14 and 18 are rejected under 35 U.S.C. §103(a) as being unpatentable over Liang (US 2008/0279273) in view of Schaepe et al. (US 2004/0148296, hereinafter Schaepe).

Each of the various rejections and objections are overcome by amendments that are made to the specification, drawing, and/or claims, as well as, or in the alternative, by various arguments that are presented.

Any amendments to any claim for reasons other than as expressly recited herein as being for the purpose of distinguishing such claim from known prior art are not being made with an intent to change in any way the literal scope of such claims or the range of equivalents for such claims. They are being made simply to present language that is better in conformance with the form requirements of Title 35 of the United States Code or is simply clearer and easier to understand than the originally presented language. Any amendments to any claim expressly made in order to distinguish such claim from known prior art are being made only with an intent to change the literal scope of such claim in the most minimal way, i.e., to just avoid the prior art in a way that leaves the claim novel and not obvious in view of the cited prior art, and no equivalent of any subject matter remaining in the claim is intended to be surrendered.

Also, since a dependent claim inherently includes the recitations of the claim or chain of claims from which it depends, it is submitted that the scope and content of any dependent claims that have been herein rewritten in independent form is exactly the same as the scope and content of those claims prior to having been rewritten in independent

form. That is, although by convention such rewritten claims are labeled herein as having been "amended," it is submitted that only the format, and not the content, of these claims has been changed. This is true whether a dependent claim has been rewritten to expressly include the elements of those claims on which it formerly depended or whether an independent claim has been rewritten to include the elements of claims that previously depended from it. Thus, by such rewriting no equivalent of any subject matter of the original dependent claim is intended to be surrendered. If the Examiner is of a different view, he is respectfully requested to so indicate.

Drawing Objection

The drawings are objected to under 37 C.F.R. §1.83(n) and §1.84(o). Applicants believe the Examiner meant §1.84(n) rather than §1.83(n) because §1.83 ends at paragraph (c).

§1.84(n) and §1.84(o) are reproduced below for ease of reference:

> (n) *Symbols*. Graphical drawing symbols may be used for conventional elements when appropriate. The elements for which such symbols and labeled representations are used must be adequately *identified in the specification*. Known devices should be illustrated by symbols which have a universally recognized conventional meaning and are generally accepted in the art. Other symbols which are not universally recognized may be used, subject to approval by the Office, if they are not likely to be confused with existing conventional symbols, and if they are readily identifiable. [emphasis added].
>
> (o) *Legends*. Suitable descriptive legends may be used subject to approval by the Office, or may be required by the examiner where necessary for understanding of the drawing. They should contain as few words as possible.

On page 13, beginning at line 31, the specification describes Figure 6, blocks 600-616 adequately. Therefore, the Examiner is respectfully requested to withdraw the objection.

Claim Objections

Claims 5, 7, 10, 14-15 and 18 are objected to for informalities. The claims are amended to address the informalities the Examiner objects to. Therefore, the Examiner is respectfully requested to withdraw the objection.

Rejection Under 35 U.S.C. §101

Claims 9-20 are rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter. Claims 9-20 are amended in a manner compliant with 101. Therefore, the Examiner is respectfully requested to withdraw the objection.

Rejection Under 35 U.S.C. §102

Claims 1-4, 6, 8-9, 11-13, 15-17 and 19-20

Claims 1-4, 6, 8-9, 11-13, 15-17 and 19-20 are rejected under 35 U.S.C. §102(e) as being anticipated by Figures 5 & 6, ¶¶0032, 0058 and 0062 of US Pat. Pub. No. 2008/0279273 of Liang. The rejection is traversed.

According to MPEP §2131.03 (III) "Anticipation under 102 can be found only when the reference discloses exactly what is claimed and that where there are differences between the reference disclosure and the claim, the rejection must be based on §103 which takes differences into account. The Liang reference fails to disclose exactly what is claimed in independent claim 1. Specifically, claim 1 is amended to recite:

> identifying a single initial descriptor that links a plurality of descriptors and two or more predecessor descriptors linking another single descriptor to thereby establish relationships between different descriptors relative to themselves and to the single initial descriptor [emphasis added].

The amendment is similar to a feature recited in claim 6. In rejecting that feature of claim 6, the Examiner cites Fig. 6 and ¶¶0058 and 0062. In contrast to the above portion of claim 1, Fig. 6 and ¶¶0058 and 0062 do not disclose a feature that establishes relationships between different descriptors relative to themselves and to an original single descriptor. Indeed Figs. 3, 5 & 6 and ¶¶0058 and 0062 disclose an object descriptor having a URL pointing to another object descriptor elsewhere. However, such mechanism does not establish relationship between the two descriptors relative to themselves as in present claim 1.

At least due to the above-described difference, the Office Action does not provide a case of anticipation of present claim 1.

As such, independent claim 1 is allowable under 35 U.S.C. §102 over Liang. Independent claims 6, 9, 13 and 17 recite relevant limitations similar to those recited in

independent claim 1. Accordingly, for at least the reasons discussed above, independent claims 6, 9, 13 and 17 also are allowable under 35 U.S.C. §102 over Liang. Furthermore, since all of the dependent claims that depend from the independent claims include all the limitations of independent claim from which they ultimately depend, each such dependent claim is also allowable under 35 U.S.C. §102 over Liang.

Therefore, the Examiner is respectfully requested to withdraw the rejection.

Rejection Under 35 U.S.C. §103

Claims 5, 7, 10, 14 and 18

Claims 5, 7, 10, 14 and 18 are rejected under 35 U.S.C. §103(a) as being unpatentable over Liang in view of Schaepe. The rejection is traversed.

This ground of rejection applies only to dependent claims and is predicated on the validity of the rejection of the independent claims under 35 U.S.C. §102 over Liang. Since such rejection has been overcome, as described hereinabove, and there is no argument put forth by the Office Action that Schaepe supplies that which is missing from Liang to render the independent claims anticipated, this ground of rejection cannot be maintained.

Therefore, the Examiner is respectfully requested to withdraw the rejection.

Conclusion

It is respectfully submitted that the Office Action's rejections have been overcome and that this application is now in condition for allowance. Reconsideration and allowance are, therefore, respectfully solicited.

If, however, the Examiner still believes that there are unresolved issues, he is invited to call Eamon J. Wall at 732-542-2280 x120 so that arrangements may be made to discuss and resolve any such issues.

Respectfully submitted,

Dated: 11/23/4

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